

WHAT IS CLAIMED IS:

1. A refrigerator comprising a fresh food section and a freezer section, at least one of said fresh food section and freezer section comprising a door comprising an external surface and an internal surface, and a light mounted to said external surface, said light electrically coupled to a processor-free light fade-out circuit.

2. A refrigerator in accordance with Claim 1, wherein said processor-free light fade-out circuit comprises a step down circuit, a one-half integrator, a square-wave generator, an integrator, and a voltage comparator wherein said step down circuit is electrically coupled to said one-half integrator, said square-wave generator is electrically coupled to said integrator, and said voltage comparator is electrically coupled to said one-half integrator and said integrator.

3. A refrigerator in accordance with Claim 2 wherein said step down circuit comprises a resistive circuit comprising at least one resistor.

4. A refrigerator in accordance with Claim 2 wherein said one-half integrator comprises at least one capacitor and at least two resistors.

5. A refrigerator in accordance with Claim 2 wherein said square-wave generator comprises an integrated circuit, at least one resistor, and a capacitor.

6. A refrigerator in accordance with Claim 2 wherein said integrator comprises at least one resistor and at least one capacitor.

7. A refrigerator in accordance with Claim 2 wherein said voltage comparator comprises an integrated circuit and at least one resistor.

8. A processor-free light fade-out circuit, said light fade-out circuit comprising a step down circuit, a one-half integrator, a square-wave generator, an integrator, and a voltage comparator wherein said step down circuit is electrically coupled to said one-half integrator, said square-wave generator is electrically coupled

09997705-113001
FOUO

said voltage comparator is electrically coupled to said one-half integrator and said integrator.

16. A method for de-energizing an appliance light in accordance with Claim 15 wherein the step down circuit comprises a resistive circuit comprising at least one resistor and wherein the one-half integrator comprises at least one capacitor and at least two resistors.

17. A method for de-energizing an appliance light in accordance with Claim 15 wherein the square-wave generator comprises an integrated circuit, at least one resistor, and a capacitor.

18. A method for de-energizing an appliance light in accordance with Claim 15 wherein the integrator comprises at least one resistor and at least one capacitor.

19. A method for de-energizing an appliance light in accordance with Claim 15 wherein the voltage comparator comprises an integrated circuit and at least one resistor.

20. A method for de-energizing an appliance light in accordance with Claim 14 wherein the appliance is a refrigerator.